



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,438	03/14/2001	Jung-wan Ko	1293.1112	2073
21171	7590	05/10/2004	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			WILSON, YOLANDA L	
			ART UNIT	PAPER NUMBER
			2113	

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/805,438

Applicant(s)

KO ET AL.

Examiner

Yolanda Wilson

Art Unit

2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 15, 22, 26, 29, 31, 34, 36, 38, 40, 42, 46, 48, 50 and 52 is/are rejected.
- 7) ☒ Claim(s) 2, 3, 5-14, 16-21, 23-25, 27, 28, 30, 32, 33, 35, 37, 39, 41, 43-45, 47, 49, 51 and 53-63 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

FINAL DETAILED ACTION

Claim Objections

1. Claims 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 23, 24, 25, 27, 28, 30, 32, 33, 35, 37, 39, 41, 43, 44, 45, 47, 49, 51, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1, 22, 26, 29, 31, 34, 36, 38, 40, 42, 46, 52 rejected under 35 U.S.C. 102(a) as being anticipated by OSTA (Optical Storage Technology Association). As per claim 1, OSTA discloses generating as test information defect management information which is generated after performing initialization with certification on a test disc obtained by making know physical defects on a blank disc and verifying the test information using reference test information for the initialization with certification to provide a test result on page 6, label 1.3 – page 13.

4. As per claim 22, OSTA discloses generating test information from the DMA information which is generated after performing initialization with certification and

executing a test for verifying the test information using reference test information on page 6, label 1.3 – page 13.

5. As per claim 26, OSTA discloses a modified drive unit generating test information from the generated DMA information of a test disc which is obtained after the recording and reproducing apparatus performs initialization with certification on the test disc and a verifier comparing the test information with predetermined test information of the initialization with certification to verify a test result on page 6, label 1.3 – page 13.

6. As per claim 29, OSTA discloses the test disc is a disc on which known physical defects are formed on a blank disc prior to the performing of the initialization with certification on page 9, label 2.2 – page 13.

7. As per claim 31, OSTA discloses performing initialization with certification on a test disc containing predetermined known physical defect information to generate test information and comparing the test information with reference test information to determine a verification of the recording and reproducing apparatus on page 6, label 1.3 – page 13.

8. As per claim 34, OSTA discloses performing certification with initialization on a test disc containing predetermined known physical defects using the reproducing and recording apparatus to generate the DMA information, generating test information from the generated DMA information and comparing the test information to determine a verification of the recording and reproducing apparatus on page 6, label 1.3 – page 13.

9. As per claim 36, OSTA discloses performing certification with initialization on a test disc containing predetermined known physical defects using the reproducing and

recording apparatus to generate the DMA information, generating test information from the generated DMA information and comparing the test information to determine a verification of the recording and reproducing apparatus on page 6, label 1.3 – page 13.

10. As per claim 38, OSTA discloses performing certification with initialization on a test disc to generate DMA information; generating test information from the generated DMA information, and comparing the test information with reference test information to determine a verification of the recording and reproducing apparatus on page 6, label 1.3 – page 13.

11. As per claim 40, OSTA discloses initialization with certification on a test disc containing predetermined defect information to generate test information and comparing the test information with reference test information to determine a verification of the recording and reproducing apparatus performing certification with initialization on a test disc containing predetermined known physical defects using the reproducing and recording apparatus to generate the DMA information, generating test information from the generated DMA information and comparing the test information to determine a verification of the recording and reproducing apparatus on page 6, label 1.3 – page 13.

12. As per claim 42, OSTA discloses a modified driver [drive] test information based on the DMA information of a test disc generated by a reproducing device performing initialization with certification on the test disc and a verifier comparing the test information with reference test information to determine a verification of the recording and reproducing apparatus performing certification with initialization on a test disc containing predetermined known physical defects using the reproducing and recording

apparatus to generate the DMA information, generating test information from the generated DMA information and comparing the test information to determine a verification of the recording and reproducing apparatus on page 6, label 1.3 – page 13.

13. As per claim 46, OSTA discloses verifying whether the uncertified recording and reproducing apparatus is compliant with a standard on page 5. OSTA discloses performing initialization with certification on a test disc to generate test information and comparing the test information with reference test information to determine a verification of the recording and reproducing apparatus, the verification indicating that the uncertified recording and reproducing apparatus is compliant with the standard. It is inherent to manufacture an uncertified recording and reproducing apparatus that updates and generates defect management area (DMA) information.

14. As per claim 52, OSTA discloses a modified drive test information based on the DMA information of a test disc generated by a reproducing device performing initialization with certification on the test disc and a verifier comparing the test information with reference test information to determine a verification of the recording and reproducing apparatus performing certification with initialization on a test disc containing predetermined known physical defects using the reproducing and recording apparatus to generate the DMA information, generating test information from the generated DMA information and comparing the test information to determine a verification of the recording and reproducing apparatus on page 6, label 1.3 – page 13.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over OSTA in view of Kato (USPN 6601201B1). OSTA fails to explicitly state displaying the test result.

Kato discloses this limitation in column 1, lines 11-13, "method for displaying results of test in which each of a plurality of semiconductor chips...is tested."

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to display the test result. A person of ordinary skill in the art would have been motivated to display the test result because the person conducting the test needs to know the results and to check for faults.

17. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over OSTA in view of Fujii (USPN 6119239A). OSTA fails to explicitly state the recording and reproducing apparatus is a digital versatile disc-random access memory (DVD-RAM).

Fujii discloses this limitation in column 6, lines 64-66, "The DVD drive is a device for handling a DVD, which is one type of optical disk, and there are a read-only DVD-ROM drive and a random access DVD-RAM drive."

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a recording and reproducing apparatus being a digital versatile disc-random access memory (DVD-RAM). A person of ordinary skill in

Art Unit: 2113

the art would have been motivated to have a recording and reproducing apparatus being a digital versatile disc-random access memory (DVD-RAM) because a DVD-RAM drive is a type of DVD drive used to execute DVD disks.

18. Claims 48 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over OSTA in view of Lenny (USPN 6467054B1). As appears in claim 48, it is inherent for a recording and reproducing apparatus to have a light source to emit a light, a focusing element to focus the light onto the optical disc to record and reproduce the information and a controller to control said light source. OSTA fails to explicitly state said controller being verified to update and generate defect management area (DMA) information by performing initialization with certification on a test disc to generate test information and comparing the test information with reference test information to determine the verification of the recording and reproducing apparatus.

Lenny discloses this limitation in column 4, lines 47-51, "A controller 19 is coupled to the I/O registers 18 and the drive sectors 20,22,23,and 24 to control the operation of the storage device 14, service commands from the host computer 12, execute diagnostic self-tests and provide results back to the host 12."

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have said controller being verified to update and generate defect management area (DMA) information by performing initialization with certification on a test disc to generate test information and comparing the test information with reference test information to determine the verification of the recording and reproducing apparatus. A person of ordinary skill in the art would have been

motivated to have said controller being verified to update and generate defect management area (DMA) information by performing initialization with certification on a test disc to generate test information and comparing the test information with reference test information to determine the verification of the recording and reproducing apparatus because a controller can control certain operations of a storage drive including tests.

19. As appears in claim 50, it is inherent for a recording and reproducing apparatus to have a light source to emit a light, a focusing element to focus the light onto the optical disc to record and reproduce the information and a controller to control said light source. OSTA fails to explicitly state a controller to update and generate defect management area (DMA) information after performing initialization with certification on the optical disc so that the defect management information is compliant with a standard.

Lenny discloses this limitation in column 4, lines 47-51, "A controller 19 is coupled to the I/O registers 18 and the drive sectors 20,22,23,and 24 to control the operation of the storage device 14, service commands from the host computer 12, execute diagnostic self-tests and provide results back to the host 12."

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a controller to update and generate defect management area (DMA) information after performing initialization with certification on the optical disc so that the defect management information is compliant with a standard. A person of ordinary skill in the art would have been motivated to have a controller to update and generate defect management area (DMA) information after performing initialization with certification on the optical disc so that the defect management

information is compliant with a standard because a controller can control certain operations of a storage drive including tests.

Response to Arguments

20. Applicant's arguments filed March 2, 2004 have been fully considered but they are not persuasive. Applicant's arguments pertaining to the rejection of independent claims 1,22,26,31,34,36,38,40,42,46,52 is as follows: "In contrast, claims 1 recites, among other features, 'generating as test information, defect management information, which is generated after performing initialization with certification on a test disc obtained by making known physical defects on a blank disc; and 'verifying the test information using reference test information for the initialization with certification to provide a test result.' As such, assuming *arguendo* that OSTA is available for use in a prior art rejection, it is respectfully submitted that OSTA does not disclose or suggest the invention recited in claim 1".

21. Examiner respectfully disagrees. As disclosed in OSTA, DMA information is generated on the test disc in order to test a drive. A test disc DMA area has to be formed during either manufacture, initialization or re-initialization (according to Park et al. USPN 6526522, column 1, lines 40-65); OSTA's test disc has to be formed out of one of those procedures.

22. Claims 4,15, and 35 of the application are dependent upon independent claims for which OSTA does disclose the limitations disclosed in those claims and explained above in this section.

23. Claims 48 and 50 are rejected under 35 USC 103 of OSTA in view of Lenny. Applicant's arguments for claim 48 include, "However, there is no suggestion that the controller 19 performs defect management with respect to a storage medium of the storage device 14 instead of performing drive failure prediction management operations with respect to the storage device 14 as a whole..." Examiner used the Lenny patent to show that a controller can be programmed to test a drive. A controller can be programmed to perform the actions listed in claim 48. This reasoning can also be applied concerning the controller to the limitations disclosed in claim 50.

Conclusion

24. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yolanda Wilson whose telephone number is (703) 305-3298. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (703) 305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


ROBERT BEAUSOLIEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100